300

We claim:

- 1. A propylene copolymer composition comprising
- 5 A) a propylene polymer containing from 0 to 10% by weight of olefins other than propylene and
  - B) at least one propylene copolymer containing from 5 to 40% by weight of olefins other than propylene,

where the propylene polymer A and the propylene copolymer B are present as separate phases and

- the propylene copolymer composition has a haze value of  $\leq$  30%, based on a path length of the propylene copolymer composition of 1 mm, and the brittle/tough transition temperature of the propylene copolymer composition is  $\leq$  -15°C.
  - 2. A propylene copolymer composition as claimed in claim 1, wherein the propylene polymer A is a propylene homopolymer.

20

10

- 3. A propylene copolymer composition as claimed in claim 1 or 2, wherein the propylene polymer A has an isotactic structure.
- 4. A propylene copolymer composition as claimed in any of claims 1 to 3, wherein the olefin other than propylene is exclusively ethylene.
  - 5. A propylene copolymer composition as claimed in any of claims 1 to 4, wherein the value for stress whitening, determined by the dome method at 23°C, is from 0 to 8 mm.
- 30 6. A propylene copolymer composition as claimed in any of claims 1 to 5, wherein the weight ratio of propylene polymer A to propylene copolymer B is in the range from 90:10 to 60:40.
  - 7. A propylene copolymer composition as claimed in any of claims 1 to 6, wherein the copolymer B is dispersed in finely divided form in the matrix A.
  - 8. A propylene copolymer composition as claimed in any of claims 1 to 7, wherein the content of olefins other than propylene in the copolymer B is from 7 to 25% by weight.

35



- A propylene copolymer composition as claimed in any of claims 1 to 8, comprising from 0.1 to 1% by weight, based on the total weight of the propylene copolymer composition, of a nucleating agent.
- 5 10. A propylene copolymer composition as claimed in any of claims 1 to 9, wherein the glass transition temperature of the propylene copolymer B determined by means of DMTA (dynamic mechanical thermal analysis) is in the range from -20°C to -40°C.
- 11. A propylene copolymer composition as claimed in any of claims 1 to 10, wherein the ratio of the shear viscosity of propylene copolymer B to that of propylene polymer A at a shear rate of 100 s<sup>-1</sup> is in the range from 0.3 to 2.5.
  - 12. A propylene copolymer composition as claimed in any of claims 1 to 11, wherein the molar mass distribution M<sub>w</sub>/M<sub>n</sub> is in the range from 1.5 to 3.5.
  - 13. A process for preparing a propylene copolymer composition as claimed in any of claims 1 to 12, wherein a multistage polymerization is carried out and a catalyst system based on metallocene compounds is used.
- 20 14. The use of a propylene copolymer composition as claimed in any of claims 1 to 12 for producing fibers, films or moldings.
  - 15. A fiber, film or molding comprising a propylene copolymer composition as claimed in any of claims 1 to 12, preferably as substantial component.

25

15

30

35